

Use of Android in Education System

¹Ganesh Jengathe, ²Dinesh V. Rojatkar

Electronics and Telecommunication dept. Government College of Engineering Chandrapur, India

Abstract: In education system various technologies are used for studies such as internet, mobile, Pc. By using mobile devices it is easy to learn anywhere and anytime. Today various OS system are used in mobile like Symbian, Windows, iPhone operating system, BlackBerry and Android. Among them Android operating system is used mostly because Android is the user friendly operating system. Due to this reason it provided more than 1 lakhs of application on education. Android operating system develop by develop by Andy Rubin, Rich Miner, Nick Sears and Chris White in 2003. In this paper we are describe how Android OS provide efficient of learning and uses of this in education system. Study material downloaded by student their by using their android mobile phones in which Android application is installed.

Keywords: Android; Operating System (OS), - Learning; M-learning. E.

I. INTRODUCTION

Android has received a lot of attention in recent years as a rising segment of the educational, instructional technology and medical field. Android application, can be any educational information through Android mobile phone technology at a student's convenience from any location. Students through use of educational technology in school felt more creative and successful in college, were more interest to learn and have increased self-confidence and self-esteem. Android mobile refers to possibility of taking place in so many locations, across so many times, and addressing so many content areas using either static or portable equipment's such as wireless laptops and mobile phones. The more-faster rising and developing computing platform with an estimated 1.9 billion mobile device users by 2014 is smart phones. Deferent kinds of educational android usages have been reported, such as language teaching using short messages, vocabulary and practice questions, and many experiential learning situation and informal problem-solving. As Android mobile phone and Internet and become very important educational equipment, the modern technologies become more effective, portable and easy to use. The mobile learning can be considered as the third wave of learning with mainframe and, desktop computers as the first and second wave. A ubiquitous learning environment is any setting in which students can become totally immersed in the learning process. Since the mobile devices support the anytime, anywhere learning, mobile learning using android can foster the growth education system. Android learning application framework enables the learner to access the educational object and interact with the other learner seam lastly from the tablet while in class, from his Android mobile phone during travelling or from his pc and laptop when at home. Android learning provides the learner the freedom from educational equipment, learning devices and learning content format and rather emphasize on the constructivist learning process. Using portable computing devices (such as laptops, tablet PC and smart phones) with wireless networks enables mobility and Android learning, allowing teaching and learning to extend to spaces beyond the traditional classroom. Due to evolution of today's mobile devices increases the number and mobile applications developed, and most of application is related to education. Recent 4G mobile hardware and software platforms allow running of faster and richer applications.

II. LEARNING ENVIRONMENT FOR ANDROID

Android learning is a form of digital learning which can be applied for learning and teaching purposes where some educational experts view it as a subset of e-learning but with a subtle contents are delivered onto Android mobile phone rather than the laptop. Teaching and learning by using android base can be easily implemented without heavy equipment. There are several factors that make mobile computing base. First, android operating system to run the mobile devices is easy and available without cost, thus making of android application and installation a simple. Second, there is a so many application base of learning materials and contents, which is continually expanding, that can be easily accessed by

students and instructors alike. For example, students can download and practice short tests or quizzes on their mobile phones where prompt feedback is instantly displayed to improve comprehension. This type of learning occurring in short bursts is appealing to young generation. In addition, students can download notes from Google doc website using android platform. Currently, the technology enables students to share and edit documents online collaboratively; thus, the concept of collective intelligence has transformed from an abstract concept into tangible realization in the educational realm.

III. EDUCATIONAL APPLICATION

This will provide an opportunity to the users to utilize their Android mobile to get educational benefits within their available time Irrespective to their location. Distance education is a learning process that focuses students from limited of location and time, while good opportunities for education. The Android always connected makes it more-easy for the students to avail this type of education facility and makes the Android mobile a perfect device for distance learning.

Android mobile within and without the classroom make it easier for students and teachers to collaborate. Students with health issues, or on sick leave, or don't come in school for other reasons would be able to attend class through their Android mobile and keep high with their work. Android mobiles are not just supplementary equipment for developed countries, but these equipment can play important part of in their education systems. The Android mobile provide access to modern society a massive amount of educational and learning resources. In developing countries Android mobile can easily compensates the limited access of internet and data access, which in turn help their infrastructure and education development. There is some important application are used in education.

1. WPS office application- In WPS office application we learn the how document is created. This software play major role during any project work. In this type of application we learn about shortcut use in this application.
2. English learning - Learn spoken English and grammar. A free English learning course used by over 6000000 learners for spoken English, grammar, and vocabulary building.
3. Aptitude - Aptitude Test and Preparation app is a collection of quantitative aptitude questions and other problems frequently asked in competitive examinations and placement papers. This application is use for banking and government job also.
4. C and C++ language - This C Programming app enables you to carry basic C programming notes in your android. This will definitely help u for preparing for interviews, tests and in many more ways.
5. Entrance Exams- Exam preparation platform for entrance exam including. We have a comprehensive question bank and study material of more than 100000 Questions in Physics, Chemistry, Math's and Biology.

IV. BACKGROUND THEOY RELATED ANDROID

A. Android Mobile Technology:

Although the use of android mobile phone and application technology in learning is still new. Initially, the majority of research has around many issues of how the technology might be applied, and to whom. The Horizon Report 2011 identifies key trends in technology and education. In today's life capacities of mobile phone is increasing day by day and technology also develops. Due to integrated chip space required is less so compositional revolution also tacks place. "People expect that we use this technology anytime anywhere. This report also shows that how to use android application for education. "Mobiles technology convergence of several technologies to use in education, including electronic book readers, annotation tools, applications for creation and composition, and social networking tools,"

B. Android Learning:

Android Learning is a type of e-learning that delivers educational contents and learning support materials through wireless communication devices. The actual implementation of Android Learning is growing faster in some capabilities than others. The e-Learning yields to collects research data on the subject, the use of Android Learning for educational and social networking and communication is more prevalent than it is for the development of custom applications, with 38.2% of implementing, designing, or building the educational case for social networking and only 24.7% for custom application and development. The research collects and shows many personal use, and 71.2% of respondents are using their personal mobile devices for business use. Of those who have conducted Android Learning implementation, 50% are seeing positive

returns. The transition from the e-learning to the Android learning revolution is characterized also by a change of terminology. For example, the multimedia, media-rich environment, interactive, hyperlinked, etc. In the Android learning era terms like spontaneous, situated, intimate, connected, formal and informal, lightweight, private, personal etc. are used to characterize the context.

C. Android Learning Architecture Android, and mobile and laptops operating system and application framework supported by Google is a recent addition in the mobile application platform. By providing an open development platform the Android had offered the developers with the ability to build extremely rich and innovative apps with a very rich set of User Interfaces which support for a broad range audio and video file formats. Developers and mobile handset manufacturers all around the world embraced this platform because of its open-source and diverse running capabilities and the application development with programming language such as Java

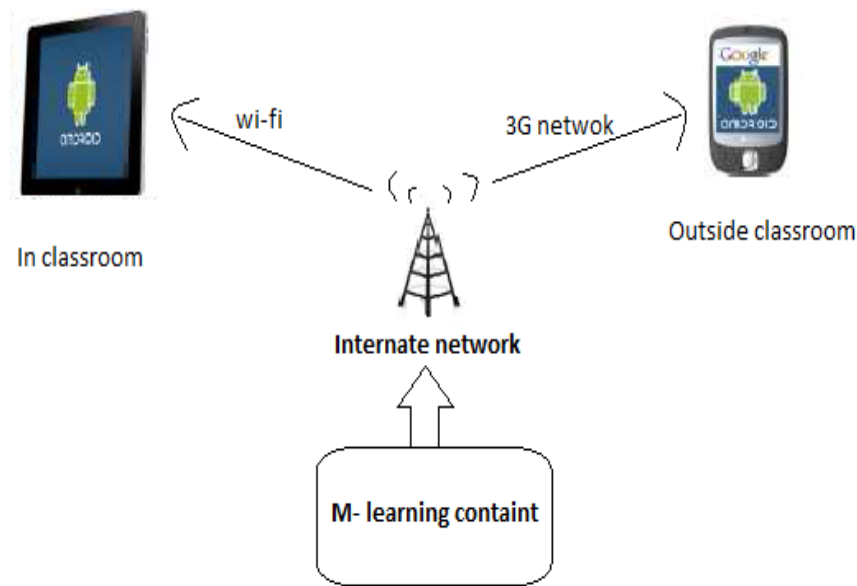


Figure 1. Block diagram architecture using android

The android Learning Architecture as seen in figure 1 has two main factors that consists of the learning environment which signifies the “anytime, anywhere learning” which can be conducted in the traditional classroom setting or outside the classroom like travelling in a bus or being at home using a wired and wireless network with both 4G and LAN to connect with the University server at all-time using Web Services architecture. Android application use for education system and in many more systems android is used. The inclusion and based on pedagogical information or constructivist theory, allowing students to create knowledge from what they see, hear, read and perceive. Interactive learning application which have both client module running on mobile devices suitable for verity of learning environments like Tablet PCs for classroom learning.

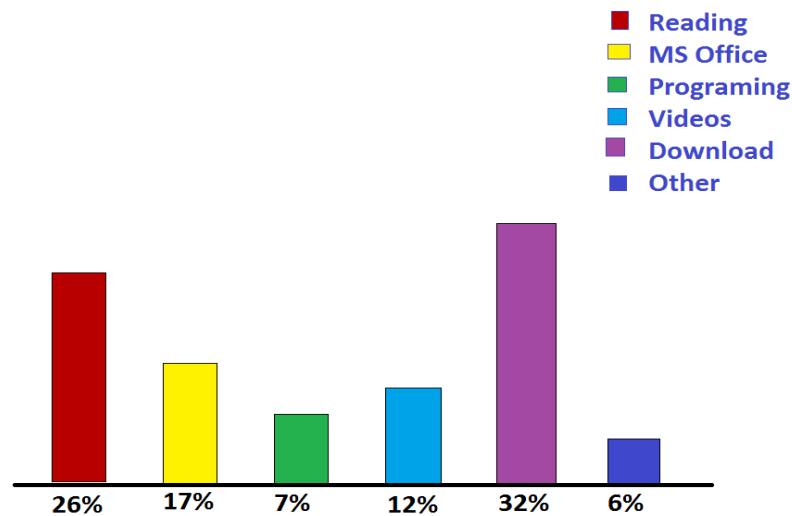
V. COMPARISON BETWEEN CLASSROOM, E- LEARNING AND ANDROID LEARNING

Table1. Comparison between e-learning and Android- learning

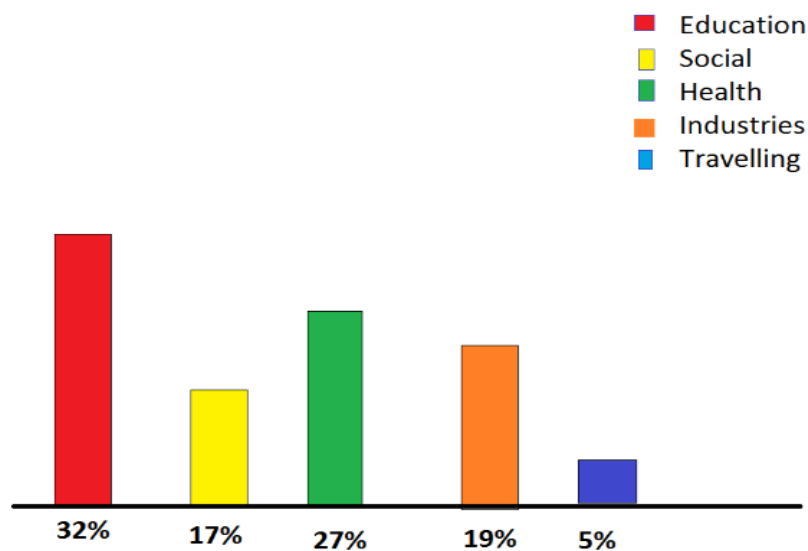
	CLASS ROOM	E- LEARNING	ANDROID LEARNING
Access	Limited	24/7	24/7
Quality	Varied	Consistent	Consistent progressive
Retention	Varied	Varied	High retention, personalize learning
Relative cost	High	High	Currently midrange, decreasing

VI. USERS RATING BAR ON ANDROID OPERATING SYSTEM

1. Uses of android application:



2. Customer Support Service of Android Operating System:



VII. CONCLUSION

With completion of this paper, we conclude that major role of android in education system. By development of technology, education level also increases and Android play major role in this field. After analysing the parameters we seems that near about 29% student learn using android software and android application. After all the limitation of mobile environment and mobile application, the uses and popularity of Android mobile application are increasing day by day. Most of the people are trying to use mobile application instead of other application. Gradually the uses of mobile applications are increasing corresponding to the use of laptop and desktop applications. All of the mobile manufactured companies and mobile application. So the modern Android mobile applications is one of the easy application for installing and more liable and more usable for the students. And the global impacts of mobile applications are going high.

In this paper we have tried to explain the so many things about Android application use in education system. And I conform this paper will help to other for further study education system using android.

ACKNOWLEDGMENT

We show our deep gratitude towards our supervisor Dr. D. V. Rojatkar who has supported and mentored us throughout our work in a righteous way.

REFERENCES

- [1] International Journal of Advanced Technology in Engineering and Science Volume No.03, Issue No. 01, January 2015 Paper on a study of android operating system with respect with users satisfaction
- [2] The educational and technical development for arm-based camera, international journal of scientific & technology research volume 2, issue 5, may 2013
- [3] Android, "Platform versions." Available: <http://developer.android.com/resources/dashbord/platformversin>
- [4] The Design and Development of Mobile Collaborative Learning Application Using Android, Journal of Information Technology and Application in Education.